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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,651	09/15/2003	Bart De Strooper	2676-6086US	2464
24247	7590	08/14/2006	EXAMINER	
TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110			EMCH, GREGORY S	
			ART UNIT	PAPER NUMBER
			1649	
DATE MAILED: 08/14/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/662,651	<b>Applicant(s)</b> STROOPER ET AL.	
	<b>Examiner</b> Gregory S. Emch	<b>Art Unit</b> 1649	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### P r i d f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30, 32-44, 46 and 49-53 is/are pending in the application.
- 4a) Of the above claim(s) 1-30, 32-43 and 51-53 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 44 and 49 is/are allowed.
- 6) ☒ Claim(s) 46 and 50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed on 14 June 2006 has been entered.

### ***Response to Amendment***

Claims 44, 46, 49 and 50 have been amended as requested in the amendment filed on 14 June 2006. Following the amendment, claims 1-30, 32-44, 46 and 49-53 are pending in the instant application.

Claims 1-30, 32-43 and 51-53 were previously withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected subject matter. Applicants' request for rejoinder of claim 32 has been considered and is not persuasive. MPEP 821.04 states, "The propriety of a restriction requirement should be reconsidered when all the claims directed to the elected invention are in condition for allowance, and the nonelected invention(s) should be considered for rejoinder." As set forth below, all of the claims directed to the elected invention are not allowable. Hence, rejoinder of claim 32 is denied, and claims 44, 46, 49 and 50 are under examination in the instant office action.

The Text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Any objection or rejection of record, which is not expressly repeated in this action has been overcome by Applicants' response and withdrawn.

### ***Specification***

The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code (see p.5, line 7). Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 46 and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Tischer et al. (J Biol Chem. 1996 Sep 6;271(36):21914-9) and as evidenced by Zhong et al. (J Biol Chem. 1994 Apr 22;269(16):12179-84).

The claim <sup>is</sup> drawn to a compound capable of modulating the interaction between a complex of a presenilin and a type I membrane protein, said compound consisting of:

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a peptide selected from the group consisting of SEQ ID NO: 5, SEQ ID NO: 8, and SEQ ID NO: 13.

According to the Tischer et al. document, Applicants' SEQ ID NO: 8 is identical to residues 39-56 of the beta amyloid region of APP (see figure 5 on p.21918). The reference teaches that modifying these residues does not abolish cleavage by  $\gamma$ -secretase and thus results in formation of an A $\beta$  peptide (Abstract and p.21927, col.2). Therefore, prior to Applicants' submission of the instant application for patent, the invention now claimed in claim 46, i.e., SEQ ID NO: 8 was isolated and described in the art. Furthermore, although the Tischer et al. reference did not appreciate the limitation of being "capable of modulating the interaction between a complex of a presenilin and a type I membrane protein," this is an inherent property of residues 39-56 of APP. Also, the Tischer et al. reference teaches that immunoprecipitation studies were described as performed according to Zhong et al., except that a different antibody to  $\beta$ -amyloid was used (p.21925, col.2, line 1). Accordingly, Zhong et al. describes raising antisera in rabbits by injecting a synthetic peptide conjugated to keyhole limpet hemocyanin that was prepared in Freund's complete adjuvant (p.12179, col.2), thus meeting the limitation of a pharmaceutically acceptable carrier as recited by claim 50. Hence, claims 46 and 50 are anticipated by Tischer et al, as evidenced by Zhong et al.

### ***Conclusion***

Claims 46 and 50 are rejected.

Claims 44 and 49 are allowable.

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***Advisory Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory S. Emch whose telephone number is (571) 272-8149. The examiner can normally be reached on Monday through Friday from 9AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet L. Andres can be reached at (571) 272-0867. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Gregory S. Emch, Ph.D.  
Patent Examiner  
Art Unit 1649  
01 August 2006



JANET L. ANDRES  
SUPERVISORY PATENT EXAMINER